Aim:

To get temperature and humidity values (generated with random function to a variable) and write a condition to continuously detect alarm in case of high temperature

Code:

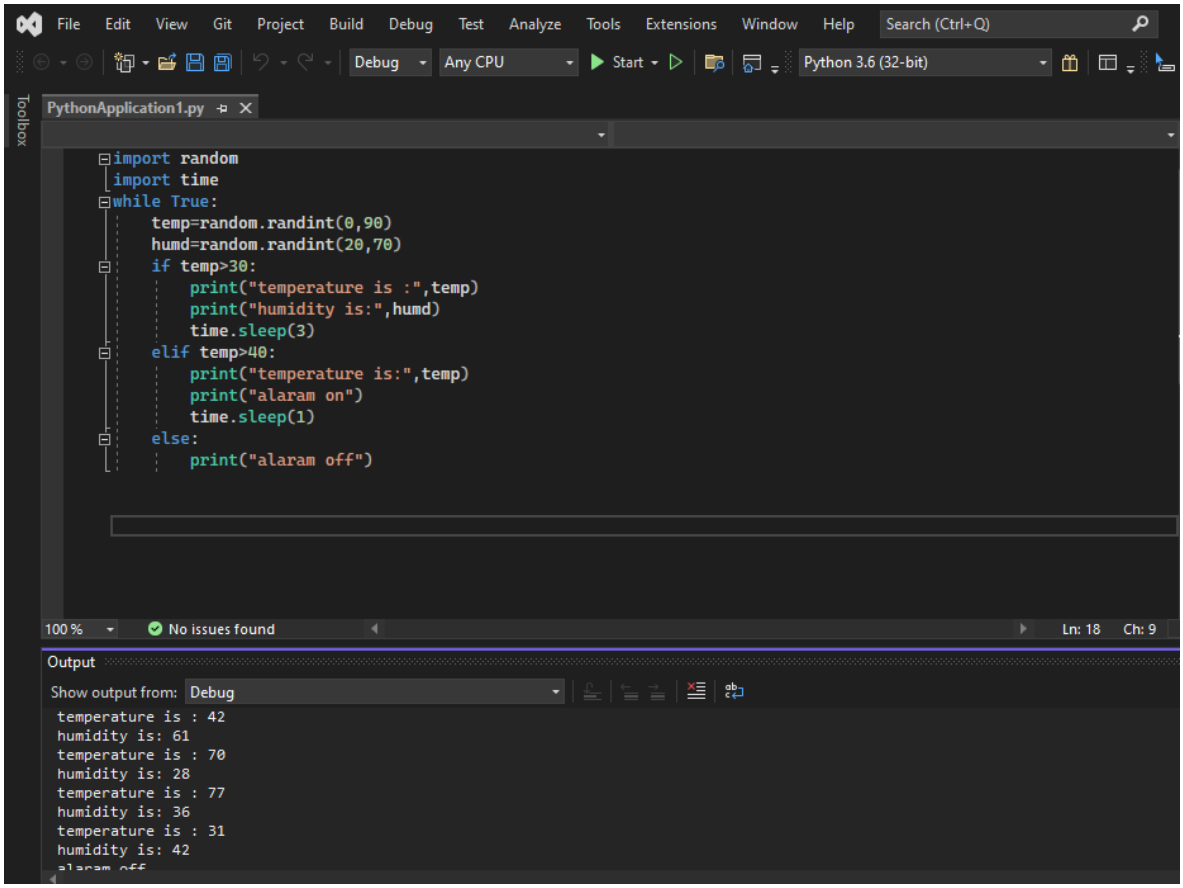
```
import random
import time
while True:
    temp=random.randint(0,90)
    humd=random.randint(20,70)
    if temp>30:
        print("temperature is :",temp)
        print("humidity is:",humd)
        time.sleep(3)
    elif temp>40:
        print("temperature is:",temp)
        print("alaram on")
        time.sleep(1)
    else:
        print("alaram off")
```

output:

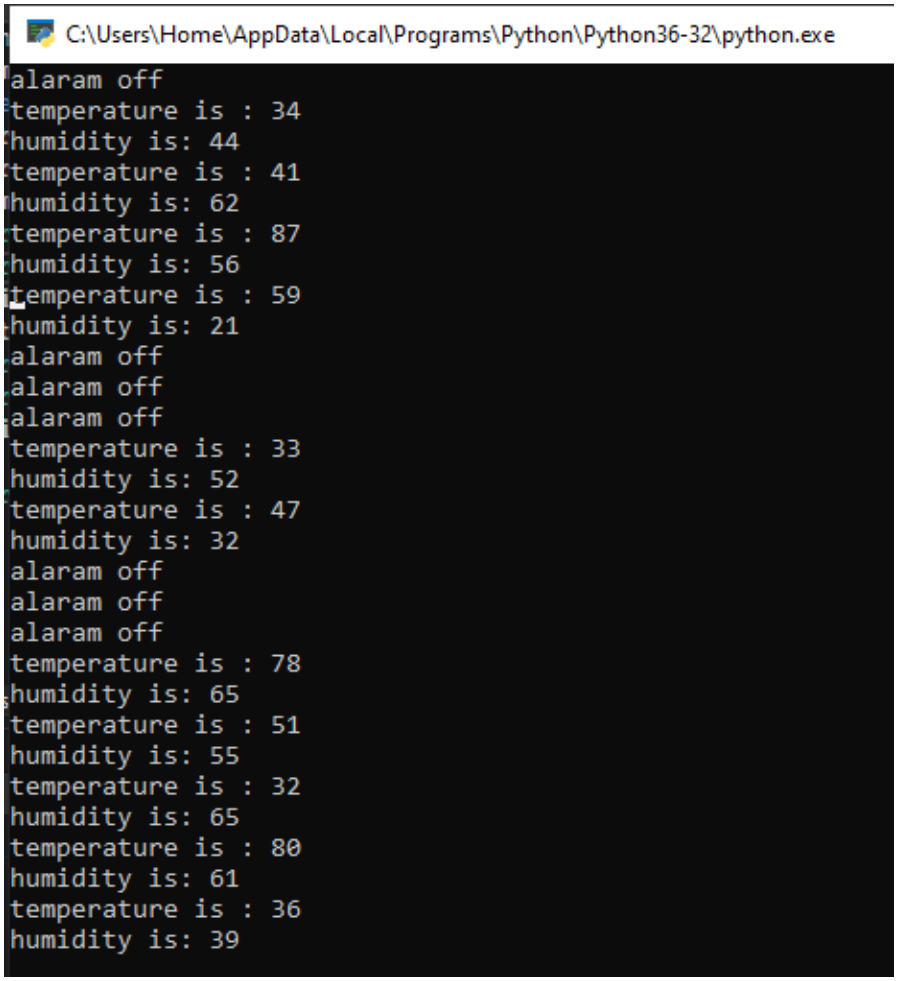
```
temperature is : 48
humidity is: 55
temperature is : 90
humidity is: 66
temperature is : 57
humidity is: 43
temperature is : 42
humidity is: 32
temperature is : 59
humidity is: 47
temperature is : 42
humidity is: 25
alaram off
temperature is : 80
humidity is: 35
alaram off
temperature is : 55
humidity is: 50
temperature is : 59
```

humidity is: 42
alaram off
temperature is : 77
humidity is: 48
temperature is : 42
humidity is: 63
alaram off
alaram off

program screen:



Output screen:



Result:

Thus temperature and humidity values are derived and alarm is detected at high temperature.